

# Toshiba IK - HD1C Instruction Manual

Camera control unit



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CAMERA CONTROL UNIT

**IKTOSHIBA**

**FCC NOTICE**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This

equipment

generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance

with the instruction manual, may cause harmful interference to radio communications.

Operation of this

equipment in a residential area may cause a radio interference in which case the user will be

required to correct the interference at his own expense.

**USER-INSTALLER CAUTION:** Your authority to operate this FCC verified equipment could be voided if

you make changes or modifications not expressly approved by the party responsible for compliance to

Part 15 of the FCC Rules.

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

**Following information is only for EU-member states:**

The use of the symbol indicates that this product may not be treated as household waste. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about the take-back and recycling of this product, please contact your supplier where you purchased the product or consult.

This manual is made from 100% recycled paper.

# INSTRUCTION MANUAL

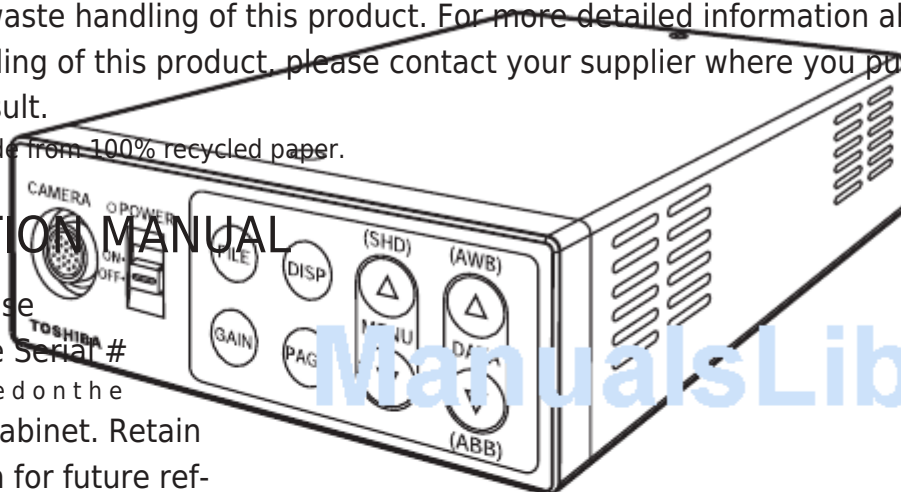
For Customer Use

Enter below the Serial # which is located on the bottom of the cabinet. Retain this information for future reference.

Model #

Serial #

IK-HD1C



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## Related Manuals for Toshiba IK - HD1C

### [Security Camera Toshiba IK-HD1 Specification](#)

Rs-232c communication specifications (18 pages)

### [Camera Accessories Toshiba IK-TF5H Instruction Manual](#)

3ccd camera head (1 page)

### [Camera Accessories Toshiba IK-HD1D Instruction Manual](#)

Camera control unit (35 pages)

### [Camera Accessories Toshiba IK-UM44H Instruction Manual](#)

Micro camera head (1 page)

### [Camera Accessories Toshiba IK-HR3H Instruction Manual](#)

Cmos color camera head (1 page)

### [Camera Accessories Toshiba IK - TU51CU Instruction Manual](#)

Camera control unit (53 pages)

### [Camera Accessories Toshiba TCB-BT1UPE Instruction Manual](#)

Battery kit (2 pages)

### [Camera Accessories Toshiba TLP848 Product Manual](#)

Toshiba photointerrupter infrared led + phototransistor product manual (12 pages)

### [Camera Accessories Toshiba BU1203MC User Manual](#)

(53 pages)

### [Camera Accessories Toshiba UP423467 Installation Instructions](#)

Battery for e400 (2 pages)

### [Camera Accessories Toshiba JK-H01A Instruction Manual](#)

Camera housing (6 pages)

## Summary of Contents for Toshiba IK - HD1C

### [Page 1: Instruction Manual](#)

CAMERA CONTROL UNIT IK-HD1C FCC NOTICE This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

### [Page 2: Safety Precautions](#)

SAFETY PRECAUTIONS Safety icons This manual contains safety instructions that must be observed in order to avoid potential hazards that could result in personal injuries, damage to your equipment, or loss of data. These safety cautions have been classified according to the seriousness of the risk, and the icons highlight these instructions as follows: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

### [Page 3: Protection Of Personal Information](#)

5. Repairs or modifications made by the user or caused to be made by the user and carried out by an unauthorized third party. 6. Notwithstanding the foregoing, Toshiba's liabilities shall not, in any circumstances, exceed the purchase price of the product.

### [Page 4: Table Of Contents](#)

Accordingly, [Toshiba/TAIS] disclaims any and all liability arising out of the use of the product in

any critical applications.

[Page 5](#) (6) SYNC... (6.1) INT screen... (6.2) Changing EXT. setting ... (7) OPTION... (7.1) Changing OUTPUT mode ... (7.2) Changing shading correction mode ... (7.3) Changing manual shading correction mode ... (7.4) Changing RGB SYNC ... (7.5) Changing RS232C baud rate ... (7.6) Changing OSD OUTPUT mode ...

## [Page 6: Cautions On Use And Installation](#)

1. CAUTIONS ON USE AND INSTALLATION • Handling the unit. Do not drop, jolt, or vibrate, as this may result in damage to the unit. This may cause problems. Treat the camera cables carefully to prevent cable problems, such as breaks in the cable and loose connections.

## [Page 7: Items Controlled By The On Screen Display](#)

3 ITEMS CONTROLLED BY THE ON SCREEN DISPLAY Item MODE AUTO, MANUAL, SS -100 AUTO level AUTO peak/average 00 10 AUTO response speed AUTO area PRESET A, PRESET B, PRESET C, PRESET D, PRESET E MANUAL speed OFF, 1/100s, 1/125s, 1/250s, 1/500s, 1/1000s, 1/3000s, 1/5000s, 1/10000s, 1/30000s, 1/50000s Syncro.

## [Page 8: Names And Functions](#)

4. NAMES AND FUNCTIONS FILE button POWER switch POWER LED Camera cable for "IK-HD1H" terminal GAIN button /B terminal Y/G terminal DC IN 12V terminal 1 2 3 4 5 REMOTE terminal Camera cable for "IK-HD1H" terminal POWER LED POWER switch FILE button GAIN button DISP button...

## [Page 9: Connection](#)

DC IN 12V terminal Y/G terminal /B terminal /R terminal REMOTE terminal EXT. SYNC terminal SYNC OUT terminal HD-SDI terminal KEY LOCK switch FORMAT switch 5 CONNECTION 1 Standard Connection 5. 1 -1 Analog Connection Lens (option) Camera Cable for IK-HD1C option IK-HD1H option...

## [Page 10: Cautions On Connection](#)

5 2 Caution on Connection Only use optional camera head model # IK-HD1H with this camera controller. The use of another head may cause damage to the control unit and camera head. When connecting the camera cables, be sure to turn off the camera control unit and any other equipment connected to it.

## [Page 11: Operation](#)

6 OPERATION A camera head "IK-HD1H" needs to be connected to this camera control unit from this section on. Refer to the item "5. CONNECTION", connect the equipment correctly. Turn on the connected equipment and the camera. When using the camera for the first time and when replacing the camera cable and the camera head, be sure to perform the ABB adjustment, refer to the item "6.1 Automatic Black Balance".

## [Page 12: White Balance](#)

6 2 White Balance For white balance adjustment of this unit, ATW (Automatic Tracking White balance), AWB (Automatic White Balance) and MANUAL (Manual white balance) adjustments are provided. Refer to the items "7.2 (3) WHT BAL (White Balance), 7. MODE SETTING BY THE ON SCREEN DISPLAY", select the desired mode.

[Page 13](#) Display AWB OK Automatic white balance adjustment finished correctly. AWB NG Automatic white balance adjustment cannot be performed because the video level is too low. LEVEL LOW Adjust the video level by increasing the illumination or opening the lens iris. AWB NG Automatic white balance adjustment cannot be performed because the video level is too high.

## [Page 14: Scene File](#)

6 3 Scene File Five scene files (A, B, C, D, E) are available as user memories for this unit. These are chosen depending on shooting conditions. By using the [FILE] button, the camera operation is changed immediately from the currently selected Scene File to the next.

## [Page 15: Shading Correction](#)

Note: White, red, green, or blue dots may occur when the gain is increased. This is not a malfunction, just certain characteristics of the CCD becoming more visible. 6 5 Shading Correction Due to the lens used or the environmental condition, color shading may occur at the upper and lower edge of the screen.

## [Page 16: Mode Setting By The On Screen Display](#)

7 MODE SETTING BY THE ON SCREEN DISPLAY Various settings can be controlled on the unit by using the on screen menu displayed on the monitor. The contents once set are memorized in the scene files (A, B, C, D, E) selected, so if the power turns off, it is unnecessary to set again when using the unit next time.

## [Page 17: Menus](#)

7 2 Menus Select the menu to change the setting by referring to the item "7.1 Using the Menus". When the [MENU UP], [MENU DOWN] buttons are pushed, the " " on the screen moves up and down. Move the " " to the item whose setting you wish to change. SHUTTER Electronic shutter The electronic shutter has four modes;...

## [Page 18: \(1.1\) Changing The Setting In Auto Mode](#)

1 1 Changing the setting in AUTO mode Move up and down Select the desired by pushing value by pushing MENU UP,DOWN DATA UP,DOWN -- 1 SHUTTER -- <FILE A> MODE LEVEL PEAK AVE SPEED AREA < MODE = AUTO> (a) Changing the video level in the automatic shutter mode Move the "...

(d) Changing the automatic shutter zone area Move the " " to AREA by pushing [MENU UP], [MENU DOWN] buttons. Select the measurement light area by pushing [DATA UP], [DATA DOWN] buttons. PRESET A PRESET B The available picture area is shown by the shading correction on the screen that is parted in 64. PRESET A PRESET E Note:...

## [Page 20: \(1.2\) Changing The Setting In Manual Mode](#)

1 2 Changing the setting in MANUAL mode Move up and down Select the desired by pushing value by pushing MENU UP,DOWN DATA UP,DOWN -- 1 SHUTTER -- <FILE A> MODE MANUAL < MODE = MANUAL> (a) Changing the shutter speed Move the "...

## [Page 21: Gain \(Video Gain\)](#)

2 GAIN (Video gain) GAIN has three modes; AUTO, MANUAL, OFF. Move the " " to MODE, push the [DATA UP], [DATA DOWN], and select one of the three modes : AUTO, MANUAL, OFF. In the OFF mode, gain is fixed to 0dB. 2 1 Changing maximum gain in AUTO (Automatic gain control) mode Move up and down Select the desired...

## [Page 22: Wht Bal\(White Balance\)](#)

3 WHT BAL(White Balance) The WHT BAL has three modes; AWB, ATW, MANUAL. Move the " " to MODE, push the [DATA UP], [DATA DOWN], and select one of the three modes : AWB, ATW, MANUAL. 3 1 Changing the setting in AWB(Automatic White Balance) mode Move up and down Select the desired by pushing...

## [Page 23: \(3.2\) Changing The Setting In Atw \(Automatic Tracking White Balance\) Mode](#)

The available picture area is shown by the shading correction on the screen that is parted in 64. PRESET A PRESET E Note: These available picture areas are not displayed on the screen. 3 2 Changing the setting in ATW(Automatic Tracking White balance) mode Move up and down Select the desired by pushing...

## [Page 24: \(3.3\) Changing Gain In Manual Mode](#)

3 3 Changing gain in MANUAL mode Move up and down Select the desired by pushing value by pushing MENU UP,DOWN DATA UP,DOWN -- 3 WHT BAL -- <FILE A> MODE R GAIN B GAIN C TEMP (1) Changing the red gain Move the "...

## [Page 25: Process](#)

4 PROCESS Move up and down Select the desired by pushing value by pushing MENU UP,DOWN



DATA UP,DOWN -- 4 PROCESS -- GAMMA ON/OFF GAMMA DTL GAIN M PED 4 1 Changing gamma correction ON/OFF Move the " " to GAMMA ON/OFF by pushing [MENU UP], [MENU DOWN] buttons. Select either ON or OFF by pushing [DATA UP], [DATA DOWN] buttons.

### [Page 26: \(4.3\) Changing Detail \(Outline\) Gain](#)

4 3 Changing detail (outline) gain Move the " " to DTL GAIN by pushing [MENU UP], [MENU DOWN] buttons. Select the desired value of the detail gain by pushing [DATA UP], [DATA DOWN] buttons. The detail decreases. 4 4 Changing master pedestal Move the "...

### [Page 27: Matrix\(Matrix Color Correction\)](#)

5 MATRIX(Matrix color correction) Red hue setting Red gain setting Green hue setting Green gain setting Blue hue setting Blue gain setting 5 1 Changing Matrix color correction ON/OFF Move the " " to MATRIX by pushing [MENU UP], [MENU DOWN] buttons. Select either ON or OFF by pushing [DATA UP], [DATA DOWN] buttons.

### [Page 28: Sync](#)

6 SYNC When an external sync signal is input, the display changes from INT (internal sync) to EXT.(external sync) automatically. 6 1 INT screen -- 6 SYNC -- MODE 6 2 Changing EXT. setting Move up and down Select the desired by pushing value by pushing MENU UP,DOWN...

### [Page 29: \(7.1\) Changing Output Mode](#)

7 OPTION Move up and down Select the desired by pushing value by pushing MENU UP,DOWN DATA UP,DOWN -- 7 OPTION OUTPUT SHADING BAUD RATE OSD OUTPUT 7 1 Changing OUTPUT mode Move the " " to OUTPUT by pushing [MENU UP], [MENU DOWN] buttons. Select either Y/P or RGB by pushing [DATA UP], [DATA DOWN] buttons.

### [Page 30: \(7.4\) Changing Rgb Sync](#)

Move up and down by pushing MENU UP,DOWN -- 7 OPTION OUTPUT RGB SYNC SHADING BAUD RATE OSD OUTPUT 7 4 Changing RGB SYNC Move the " " to RGB SYNC by pushing [MENU UP], [MENU DOWN] buttons. Select G, ALL ON or ALL OFF by pushing [DATA UP], [DATA DOWN] buttons. \* When Y/P is selected at OUTPUT, RGB SYNC change cannot be performed.

### [Page 31: External Sync](#)

7 3 External Sync When using the unit with an external sync signal to EXT. SYNC terminal on the rear panel. When the external sync signal is input, the camera automatically switches its sync from the internal sync to the external sync. EXT.

### [Page 32: Before Making A Service Call](#)

8. BEFORE MAKING SERVICE CALL Symptom Is power supplied correctly? No picture Is the power switch on, and the power LED illuminated? Is the lens iris adjusted correctly? Are the camera and video cables connected correctly? Is the shutter mode set correctly? Is the monitor on, and in working condition? Is the monitor adjusted correctly? Poor color...

### [Page 33: Specifications](#)

9. SPECIFICATIONS \* These conditions are only satisfied when the camera control unit is connected to camera head model # IK-HD1H. Power supply 12V DC Power consumption Approx. 10.3 W (including a camera head) Pick-up system RGB, 3CCD, Micro prism system Image sensor 1/3 inch, IT CCD Output pixels...

### [Page 34: External Appearance Diagram](#)

10. EXTERNAL APPEARANCE DIAGRAM Unit : mm [inch] [Front] [Rear]...

[Page 35](#) Limited Warranty – TOSHIBA CCD Camera The Imaging Systems Division of Toshiba America Information Systems, Inc. ("ISD") makes the following limited warranties with regard to this CCD Camera ("Product"). These limited warranties extend to the Original End-User ("You[r]"). One (1) Year Limited Warranty of Labor and Parts ISD warrants that this Product will perform in accordance with specifications for a period of one (1) year from the date of purchase by the Original End-User.

This manual is also suitable for:

[lk-hd1c](#)